

## CLAIMS

1. An array speaker system in which signals having prescribed time differences are supplied to a plurality of speaker units arranged in an array so as to perform directivity control on audio signal beams emitted from the speaker units, said array speaker system comprising:
  - a delay memory for delaying an input signal in units of a sampling period;
  - a control means for calculating delay times to be applied to the signals respectively supplied to the speaker units; and
  - an interpolation processing means for performing interpolation processing on output of the delay memory based on the delay times calculated by the control means, wherein an output of the interpolation processing means is supplied to each of the speaker units.
2. An array speaker system according to claim 1, wherein the delay memory has a plurality of delay taps that delay the input signal in units of the sampling frequency so as to impart different delay times to the input signal, thus providing delay output.
3. An array speaker system according to claim 1, wherein the interpolation processing means performs linear interpolation on the output of the delay memory.
4. An array speaker system according to claim 1, wherein an FIR low-pass filter is formed using the delay memory and the interpolation processing means.